



DOCKET NO: 205892US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

ANTON NEGELE, ET AL.

: EXAMINER: REDDICK, M. L.

SERIAL NO.: 09/830,566 :

FILED: May 7, 2001

: GROUP ART UNIT: 1713

FOR: AQUEOUS DISPERSIONS OF :  
WATER-SOLUBLE POLYMERS OF N-  
VINYL CARBOXAMIDES, THEIR  
PREPARATION AND THEIR USE

DECLARATION UNDER 37 C.F.R. §1.132

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

I, Volker Braig, Dr. rer. nat., a citizen of the Federal Republic of Germany and residing at 4, In der Steig, 69469 Weinheim, Federal Republic of Germany, declare as follows:

I am a fully trained chemist, having studied chemistry at the University of Konstanz, from 1992 to 1997, and at the Technical University of Aachen, from 1997 to 2001;

I am well acquainted with technical English;

I joined BASF Aktiengesellschaft of 67056 Ludwigshafen, Federal Republic of Germany, in 2001, since when I have been working on the development of N-vinylformamide and N-vinylamine polymers.

I am familiar with the field to which the subject application relates.

Application No. 09/830,566  
Reply to Office Action of

Essentially, the claims of the instant application relate to an aqueous dispersion of a water-soluble polymer of N-vinylformamide and/or N-vinylacetamide, wherein the dispersion contains, based on 100 parts by weight of water

- (A) from 5 to 80 parts by weight of a water-soluble polymer containing N-vinylformamide units and/or of N-vinylacetamide units and having a particle size of from 50 nm to 2  $\mu$ m
- (B) from 1 to 50 parts by weight of at least one polymeric dispersant which is selected from the group consisting of carboxymethylcellulose, water-soluble starch, starch esters, starch xanthogenates, starch acetates, dextran, polyalkylene glycols, polyvinyl acetate, polyvinyl alcohol, polyvinylpyrrolidone, polyvinylpiperidine, polyethyleneimine, polyvinylimidazole, polyvinylsuccinimide, a 1:1 molar ratio of copolymer of N-vinylcaprolactam and N-vinylacetamide, and polydiallyldimethylammonium chloride,

the aqueous dispersion being substantially free of inorganic salt.

The particle size as disclosed in the description and claims is not correct. Therefore, I have reworked two representative examples of the instant application to determine the particle size properly.

The examples were reworked exactly as described in the instant application. As stirrer typ, which is not disclosed, an anchor stirrer was chosen at a speed of 200 rpm. This corresponds to a production power input.

Application No. 09/830,566  
Reply to Office Action of

For the particle size measurement a drop of the dispersion was brought onto a microscope slide and covered with a glass cover. The particle size was determined with an optical microscope (Zeiss Diaplan) at a 400 fold magnification with contrast enhancement due to differential interference contrast (DIC).

The polymer dispersion of example 1 of the instant application shows an average particle size of uniformly distributed particles of  $3 \mu\text{m} \pm 2 \mu\text{m}$ , whereas the polymer dispersion of example 2 shows an average particle size of uniformly distributed particles of  $8 \mu\text{m} \pm 2 \mu\text{m}$ .

Therefore, the particle size of the particles in the instant application should be corrected. The particle size of uniformly distributed particles is in the range of from 1 to 10  $\mu\text{m}$ .

This particle size corresponds to the particles after polymerization of both components (A) and (B), because the particle size of solely component (A) is not detectable.

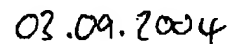
Application No. 09/830,566

Reply to Office Action of

I further declare that all statements made herein of my own knowledge are true and all statements made on information or belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Signature



Date